# BLOCKCHAIN IN RETAIL SECTOR

## A Quick Summary

CryptoIndexSeries

# RETAIL

Retail industry is going through a digital transformation, similar to many other industries. The demands of new generation of customers require this transformation to make shopping experience much faster and more personal with relevant recommendations, alternative payment methods and higher level of security. All these necessitate the adoption of relevant technologies in the retail industry.

Additionally, this industry suffers from unreliable suppliers, poor quality ingredients, counterfeiting, especially of luxury branded goods, and secondary ticketing (Williams, 2019).

In relation to this, there is a clear need to monitor each step in the supply chain including the transfers of ownership and product transformations before the products reach the end user through a retailer. Without the transparency in any of these steps, it is difficult to prove the authenticity of products or to find the root-cause of faults occurred in a batch of products during production, transportation or any other process. (Anwar, 2019)

Some of the areas of interest in Retail Sector and how Blockchain Technology will address these areas are summarized below (Leong, Viskin, & Stewart, 2018):

- **Monitoring in Supply Chain :** Blockchain solutions provide retailers means to better track the origin of stock, gives them a higher level of control over what they sell and provides assurances for food safety. Blockchain solutions can also be utilised to control supply chains in terms of changes to data such as manufacturing dates and locations can be tracked. (Blockchain in Retail Comprehensive Study by Type, Application, Organization, Players and Region - Global Market Outlook to 2024, 2019)

- **Fraud and Counterfeit Prevention:** One of the incentives for manufacturing/retail companies to start using blockchain technology is also to prevent counterfeit items from reaching consumers and, as a result, damaging their reputation. One of the most reputable diamond firms has recently adopted blockchain technology to track their gems from mine to retail. As part of this process, they record every time the gems exchange hands which leads to reduced risk of fraud, and giving consumers greater trust and visibility. (GetSmarter, 2019)

- **Payments:** Especially in handling cross-border payments and micro-payments, the use of cryptocurrencies can ease the payment process for retailers.

- **Loyalty Programs:** Blockchain solutions would allow customers to store all their points, rewards, coupons in a single digital wallet. Blockchain Solutions can also offer real-time allocation and redemption of rewards to consumers. These advancements would make loyalty programmes between consumers and across retailers, brands and stores more flexible. (Kumar, Bisht, & Srivastava, 2019)

- **Identity Management:** Blockchain solutions can also support retailers to keep and manage their customers' digital identity. Smart contracts can also be utilised in the management of retailers' consumer data privacy compliance. This would help retailer oversee permissions and access to customer information.

## Subsectors

Supply Chain.

## Stakeholders

Suppliers, Manufacturing Companies, Logistics providers, freight forwarders, shipping lines, stores, customers.

## Asset Type

The type of tokens in this sector are generally utility tokens with exceptions. Depending on the coin, there are different services provided. Examples to these services include, but not limited to access to authorised data, product recall interfacing, reward payment, reimbursements, digital payment, validation of smart contracts, smart insurance for supply chains.

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